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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,622	10/09/2003	Ronald P. Smith	12-1229	8426
<sup>23400</sup> POSZ LAW GI	7590 04/19/2007 ROUP PLC:	EXAMINER		
12040 SOUTH	LAKES DRIVE	NGO, CHUONG D		
SUITE 101 RESTON, VA 20191			ART UNIT	PAPER NUMBER
,			2193	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	\ MAIL DATE	DELIVERY MODE	
3 MONTHS		04/19/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)			
Office Action Summary		10/682,622	SMITH, RONALD P.			
		Examiner	Art Unit			
		Chuong D. Ngo	2193			
Period fo	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)	Responsive to communication(s) filed on 01 Fe	ebruary 2007				
• =	This action is <b>FINAL</b> . 2b) This action is non-final.					
3)	<b>,</b> —					
,—	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) 🖂	Claim(s) <u>1-8</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
	Claim(s) <u>1-3 and 5-7</u> is/are allowed.					
	6)⊠ Claim(s) <u>4 and 8</u> is/are rejected.					
	Claim(s) is/are objected to.					
8)[	Claim(s) are subject to restriction and/or	r election requirement.				
Application Papers						
9) The specification is objected to by the Examiner.						
	The drawing(s) filed on is/are: a) acce		Examiner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority ι	under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No.					
	3. Copies of the certified copies of the priority documents have been received in this National Stage					
* 0	application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.						
Attachmen	ıt(s)	•				
	ce of References Cited (PTO-892)	4) Interview Summar	y (PTO-413)			
2)   Notic	ce of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail [	Date			
	mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	5) Notice of Informal 6) Other:	Patent Application			

## **DETAILED ACTION**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 4 and 8 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Kaneko et al. (6,747,946).

Kaneko et al disclose in figure 11 a method for effectively pruning a FFT circuit by forcing the input signals (X[2]-X[4],X[6]-X[8], X[10]-X[12], and X[14]-X[8]) of predetermined butterfly modules to be pruned to zero (ground), which in turn clearly force the input signals of one or more butterfly modules of one or more successive computational states needed to be pruned to zero as claimed (see also figure 14).

- 3. Claims 1-3 and 5-7 are allowed.
- 4. Applicant's arguments filed on 02/01/2007 have been fully considered but they are not persuasive because it is so well known that connecting to a signal to a ground is to force the signal to have a value of zero. Further, it is clear from figure 14 that forcing the input signals X[2]-X[4], X[6]-X[8], X[10]-X[12], and X[14]-X[8] of predetermined butterfly modules or the

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first stage to be pruned to zero (ground), also force the input signals of one or more butterfly modules of one or more successive computational stages needed to be pruned to zero.

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuong D. Ngo whose telephone number is (571) 272-3731. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Chuong D Ngo Primary Examiner Art Unit 2193

11/25/2006